

## **Star Duel Algorithm**

1. Sets the background colour to black
2. Draws all of the cutscenes and plays background music
3. Initialises all objects
- 4.
5. Start loop
- 6.
7.     Initialises variables to exit the game as false
- 8.
9.     Plays background music for the menu
- 10.
11.    Draws the main
12.    Exits the main menu
- 13.
14.    Clears the screen
15.    delay (500)
- 16.
17.    Start if iPlayers = 2 then
18.        Draws the battle selection menu
- 19.
20.        Re-initialises all ships
21.        Initialises all capacitors
- 22.
23.        Plays the battle music
- 24.
25.        Start loop
- 26.
27.            Draws the background of the battle
- 28.
29.            Checks for any collisions between objects
- 30.
31.            Creates and moves debris
- 32.
33.            Moves and shows all of the laser objects
- 34.
35.            Moves and shows all of the torpedo objects
- 36.
37.            Shows and moves all of the ship objects
- 38.

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39.         Draws the interface at the bottom of the screen
40.
41.         Draws the Deuterian ship and checks for button presses
42.
43.         Draws the Quintitian ship and checks for button presses
44.
45.         Validates array subscripts and positive integers
46.
47.         Displays the pause menu if the user pressed the pause button
48.
49.         Exit when one or both ships are destroyed
50.
51.         Exits when the user requests it from the pause menu
52.
53.
54.     end loop
55.
56.         Clears the screen
57.         Removes all objects from the screen
58.
59.         Draws the background and places the ships
60.
61.         Draws the Deuterian ship and checks for button presses
62.
63.         Draws the Quintitian ship and checks for button presses
64.
65.         Stops the music
66.
67.         Draws the interface
68.
69.     Start if both ships collided
70.
71.         Both ships explode and are placed outside the screen
72.
73.         Draws the text that it is a draw
74.         Plays a sound effect
75.
76.     Elsif the Deuterian ship's health is 0
77.         Deuterian ship explodes and is placed outside the screen
78.         Draws text proclaiming Quintos to be the winner
79.         Plays a sound effect
80.
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81.     Elself the Quintitian ship's health is 0
82.         Quintitian ship explodes and is placed outside the screen
83.         Draws text proclaiming Quintos to be the winner
84.         Plays a sound effect
85.
86.     End if
87.     Exit when a key is pressed
88. End loop
89. end if
90. Input.Flush
91.
92. Else
93.     Re-initialises all ships
94.     Initialises all training capacitors
95.
96.     Draws the training briefing screen and waits for a keypress to
    continue
97.
98.     Plays training music
99.     fork PlayBackgroundMusic (TrainingMusic)
100.
101.     loop
102.
103.         Sets up the training background
104.
105.         Creates debris at regular intervals
106.
107.
108.         Displays and moves all of the lasers
109.
110.         Displays and moves the torpedos
111.
112.         Makes ships immune to damage by adding armour
113.
114.         Draws the interface at the bottom of the screen
115.
116.         If a key is pressed to switch to the Quintitian ship
117.             Draws the Quintitian ship and checks for button presses
118.
119.             Banishes the Deuterian ship
120.             Draws a rectangle over the Deuterian interface
121.
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122.         Elsf a key is pressed to switch to the Deuterian ship
123.             Draws the Deuterian ship and checks for button presses
124.
125.             Banishes the Quintitian ship
126.             Draws a rectangle over the Quintitian interface
127.         end if
128.
129.         Checks for any collisions
130.
131.         Validates array subscripts and positive integers
132.
133.         Checks if the user paused the game and displays the menu if
            they have
134.
135.         end loop
136.     end if
137.
138.     View.Update
139.
140.     Exits the loop when the user requests it
141. end loop
```